Vertebral artery dissection causing an acute C5 radiculopathy

Figure Radiology and clinical images

(A) MRI T2 sagittal view demonstrates absence of significant disk herniations. (B) Axial cut from just above the C5 vertebra demonstrates impingement of the root by the vertebral artery. (C) Magnetic resonance angiography demonstrates a large expansile left vertebral dissection. (D) Atrophy of the left deltoid and biceps. (Potentially identifying tattoos have been blurred.)

A 32-year-old mechanic developed severe left neck pain at work. Two days later, he experienced left arm weakness, particularly shoulder and elbow flexion; after another 2 days, he noted numbness at the left jaw angle. Examination revealed weakness in the C5 myotome and absent biceps reflex, but no facial or jaw numbness.

Brain MRI was unremarkable. Cervical MRI revealed no disk herniations (figure, A); however, a large left V2 vertebral artery dissection was noted compressing the C5 nerve root (figure, B). Magnetic resonance angiography (figure, C) and CT angiography confirmed an intramural hematoma with a dissection flap from C4–C2. EMG and neuroexamination 1 month later revealed a subacute C5 radiculopathy and atrophy in the C5 myotome (figure, D).

Colin Quinn, MD, Johnny Salameh, MD

From the University of Massachusetts Memorial Medical Center, Worcester.

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Correspondence to Dr. Quinn: colincq@gmail.com

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